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EXAMINER	
KUMAR, SRILAKSHMI K	

ART UNIT	PAPER NUMBER
2629	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/069,639	CLIFTON-BLIGH, GERVASE	
	Examiner	Art Unit	
	SRILAKSHMI K. KUMAR	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 May 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The following office action is in response to the Request for Continued Examination filed on May 15, 2008. Claims 1-28 are pending.

Claim Objections

1. Claims 2 and 19 are objected to because of the following informalities: Claims 2 and 19, teach the limitation of "optionally" in line 12 of claim 2 and line 14 of claim 19. This limitation renders the claims indefinite as the examiner is unsure whether the limitations that follow "optionally" are part of the claim or not. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. ***Claims 1-6, 9-21, 24, 25, and 28*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (UK Patent No. 2,145,257).

As to independent **claims 1 and 18**, Smith teaches a method and device for allowing a user to select one of a variable number of items, the method employing a device having a display area (24, Figs. 6-8) and, separately from the display area, a data input means (Figs. 1-4) which registers a selection made by the user (abstract) within a range, the method including: displaying within the display area a variable number of regions (26-29) equal to the variable number of items (page 3, lines 11-12); defining within the range a variable number of sections equal to the variable number of items (26-29, abstract, pages 3, lines 11-23), the arrangement of said sections

corresponding to the arrangement of said regions of the display area (Figs. 6 and 7), each section corresponding to a respective region (page 3, lines 3-7), whereby the user can select one of the said items by selecting a respective one of said sections (page 3, lines 11-23).

While Smith fails to expressly teach a loop-shaped range, Smith teaches that that any suitable number and arrangement of micro switches and any suitable number and arrangement of items of information on the screen may be used (see page 3, lines 28-32), and further states that although the rectilinear arrangement of switches and portions of the display is preferred as providing a readily observable correspondence between the positions of the switches and the elements of the display, it will be appreciated that any other suitable pattern or configuration of the switches and elements of the display may be provided (see page 3, lines 62-65). Therefore, through these teachings there is the suggestion that the displayed information, as well as the switches, can have a loop-shaped arrangement, wherein Smith teaches that the device has particular usage to users with disabilities. The switch arrangement is located in close proximity to the user's mouth and the user thereby operates the switches through usage of the tongue, wherein the switches are closely grouped in a pattern (see column 2, lines 14-17). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the input device of Smith to have the loop arrangement as suggested and explained above to be used according to the system which is taught by Smith, thereby providing an additional alternative method and apparatus for controlling the displayed information. This allows the user with a switch arrangement that is more convenient and more comfortable to use.

As to independent **claims 2 and 19**, Smith teaches a method and device for allowing a user to select one of a variable number of items, the method employing a device having a display

area (24, Figs. 6-8) and, separately from the display area, a data input means (Figs. 1-4) which registers a selection made by the user (abstract) within a range, the method including at least once performing the steps of: displaying within the display area a variable number of regions (24, Figs. 6-8), each region corresponding one of the variable number of items (page 3, lines 11-12), defining a variable number of subsets of said regions (32-35); defining within the range a variable number of sections equal to the variable number of subsets (page 3, 11-23), the arrangement of said sections corresponding to the arrangement of the respective subsets of regions (31), whereby the user can select one of said subsets by selecting the respective one of said sections (page 3, lines 11-23); optionally, at least one step of; defining a variable number of subsets of said selected subset of regions (page 3, lines 11-23); and defining within the range of a variable number of sections equal to the variable number of subsets, the arrangement of said sections corresponding to the arrangement of the respective subsets of regions, whereby the user can select one of said subsets by selecting the respective one of said sections (page 3, lines 11-23); and defining within the range a variable number of sections equal to the variable number of items in the said selected one of the respective subsets of regions (31, page 3, lines 11-23), the arrangement of said sections corresponding to the arrangement of the respective regions representing the items, whereby the user can select one of said items by selecting the respective one of said sections (page 3, lines 11-23).

While Smith fails to expressly teach a loop-shaped range, Smith teaches that that any suitable number and arrangement of micro switches and any suitable number and arrangement of items of information on the screen may be used (see page 3, lines 28-32), and further states that although the rectilinear arrangement of switches and portions of the display is preferred as

providing a readily observable correspondence between the positions of the switches and the elements of the display, it will be appreciated that any other suitable pattern or configuration of the switches and elements of the display may be provided (see page 3, lines 62-65). Therefore, through these teachings there is the suggestion that the displayed information, as well as the switches, can have a loop-shaped arrangement, wherein Smith teaches that the device has particular usage to users with disabilities. The switch arrangement is located in close proximity to the user's mouth and the user thereby operates the switches through usage of the tongue, wherein the switches are closely grouped in a pattern (see column 2, lines 14-17). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the input device of Smith to have the loop arrangement as suggested and explained above to be used according to the system which is taught by Smith, thereby providing an additional alternative method and apparatus for controlling the displayed information. This allows the user with a switch arrangement that is more convenient and more comfortable to use.

With reference to **claim 3**, as explained above with reference to **claims 1 and 2**, Smith suggest that the regions (26-29) are provided in a pattern to correspond to the input means (see page 3, lines 4-7). The regions are displayed by partitioning the display area into a number of elements corresponding to the number of regions, and displaying a region in each of the path elements is taught in the disclosure wherein it is stated that in any arrangement according to the invention the switches are arranged to some particular spatial configuration or pattern and the visual display has a corresponding spatial layout (see page 3, lines 41-42). More specifically having the loop-shaped arrangement as explained above with reference to **claims 1 and 2**.

With reference to **claim 4**, Smith teaches for each possible number of regions up to a maximum, there is a predefined arrangement of that number of regions (see page 3, lines 29-42).

With reference to **claim 5**, Smith teaches that the regions can be arranged in any configuration, more specifically having the loop-shaped arrangement as explained above with reference to **claims 1 and 2**. Wherein if the configuration has the loop-shaped arrangement as explained above, it would be implicit that the respective centers are not in a straight line (see page 3, lines 62-65).

As to dependent **claims 6 and 21**, limitations of claims 1 or 2, and further comprising, Smith fails to expressly teach in which the range is a range of circumferential locations within a loop shaped contact sensitive area. Smith teaches that that any suitable number and arrangement of micro switches and any suitable number and arrangement of items of information on the screen may be used (see page 3, lines 28-32), and further states that although the rectilinear arrangement of switches and portions of the display is preferred as providing a readily observable correspondence between the positions of the switches and the elements of the display, it will be appreciated that any other suitable pattern or configuration of the switches and elements of the display may be provided (see page 3, lines 62-65). Therefore, through these teachings there is the suggestion that the displayed information, as well as the switches, can have a loop-shaped arrangement, wherein Smith teaches that the device has particular usage to users with disabilities. The switch arrangement is located in close proximity to the user's mouth and the user thereby operates the switches through usage of the tongue, wherein the switches are closely grouped in a pattern (see column 2, lines 14-17). Therefore it would be obvious for the switches to have a loop-shaped arrangement to fit the mouth of the user when operating the

switches of the device. Wherein the switches are activated by the tongue of the user, thereby making the range of circumferential locations within a loop-shaped arrangement contact sensitive. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the input device of Smith to have the loop arrangement as suggested and explained above to be used according to the system which is taught by Smith, thereby providing an additional alternative method and apparatus for controlling the displayed information. This allows the user with a switch arrangement that is more convenient and more comfortable to use.

With further reference to **claim 9**, Smith teaches in which the sections collectively cover the whole of the contact sensitive area, so that defining the sections is equivalent to partitioning the entire area (see page 3, lines 54-61).

With reference to **claim 10**, Smith teaches that the user can vary the selection of the item, and by a predetermined action make a definitive selection (see page 3, lines 11-23).

With reference to **claims 12 and 13,** Smith teaches that on each occasion, selecting from items that are logically related to the item selected in the previous step (see Figures 6-9) and that the logical relationships are of any type suitable for defining a hyperspace (see page 3, lines 41-43).

With reference to **claims 14-17**, While Smith teaches the usage of computer/logic array (23), which is programmed so that information is displayed on the screen in a configuration corresponding generally to the pattern of switches so that different portions of the display may be selected by operation of the appropriate switches or combination of switches (see page 3, lines 1-7), Smith fails to teach that the items are data files, sets of data files or portions of data files.

Examiner takes Official Notice that the items are data files, sets of data files, or portions of data files; that at least one of the data files are stored in a location remote from the device but accessible to the device; that upon selecting a data file, the user is presented with at least one information about that data file; and that upon selecting a data file, the user can open the selected data file are well known in the art to be a conventional storage and recovery of information stored or to be processes by the processing device.

Therefore it would have been obvious for one having ordinary skill in the art at the time of the invention to allow the computer/logic array (23) of Smith to include the conventional usage of storage and recovery of information stored or to be processed by the processing device in order to carry out the functions of the user input for providing the user with the requested information.

With further reference to **claims 20**, Smith teaches that the data input means (Figures 1-4) is not adapted to display information (see abstract).

With reference to **claim 24**, Smith teaches that the device is an item of consumer electronics (see page 2, lines 1-3).

With reference to **claim 25,** Smith teaches that the visual display could be a cathode ray screen, LED display, or a heads-up display (see page 3, line 1-3) all of which are low-resolution type display devices.

With reference to **claim 28**, Smith teaches that a computer readable medium having stored thereon a computer program which causes the computer device to perform a method according to claim 1 or claim 2 (see page 4, line1-page 5, line 44).

4. ***Claims 7 and 22*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith as applied to **claims 6 and 21** above, and further in view of Welch et al. (U.S. Patent No. 4,121,204).

With reference to **claims 7 and 22**, while Smith suggest the usage of a loop-shaped range having a range of circumferential locations within a contact sensitive area as explained above with reference to **claims 1 and 18**, there fails to be any disclosure of the contact sensitive area encircling the display area.

Welch et al. teaches a user input/output device (108) having a contact sensitive area (112) encircles the display area (110) (see column 5, line 67-column 6, line 6).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the usage of an input device having a display area encircled by a contact sensitive area similar to that which is taught by Welch et al. to be used as the loop-shaped contact sensitive arrangement similar to that which is suggested by Smith in order to thereby provide an improved input device which is extremely effective for control functions and easily understood by users.

5. ***Claims 26 and 27*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith as applied to **claims 18 and 19** above, and further in view of Yamagishi et al. (U.S. Patent No. 6,178,338).

With further reference to **claims 26 and 27**, while Sith teaches everything as explained above with reference to claims 18 and 19 there fails to be any disclosure of the device being a one-piece unit nor that the device is portable. However, the usage of input devices in portable one-piece units is well known in the art.

Moreover Yamagishi et al. teaches a portable one-piece unit (10) containing a display (14) and a jog dial (20) for selecting from a menu (see column 3, lines 1-33, column 3, line 66-column 4, line 14), wherein it is further stated that scrolling through the option menu may be performed by the use of a touch sensitive technology (see column 9, lines 12-21).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the usage of a portable one-piece unit having a display and a dial/touch sensitive input unit for scrolling through menus, as disclosed by Yamagishi, with the system having the functionality as disclosed by Smith in order to provide easier portability to the user when transporting the device from one environment to another.

Allowable Subject Matter

6. ***Claims 8 and 23*** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments filed May 15, 2008 have been fully considered but they are not persuasive.

With respect to applicants arguments of where the prior art of Smith fails to teach a variable number of regions and a variable number of items, examiner, respectfully disagrees. Applicant argues where Smith references four quadrants of the display and not a variable number of sections of an input range. Examiner, respectfully, disagrees. Smith teaches a variable number of regions and variable number of items on page 3. Specifically, page 3, lines 28-32, Smith teaches where the arrangement shown is just an example and can be extended to cover any

suitable number and arrangement. One can deduce that a variable number of microswitches are provided. With respect applicant's arguments on where the user is always choosing from the same number of input sections, examiner, respectfully disagrees. Smith teaches having a variable number of regions (24, Figs. 6-8), each region corresponding one of the variable number of items (page 3, lines 11-12), defining a variable number of subsets of said regions (32-35); defining within the range a variable number of sections equal to the variable number of subsets (page 3, 11-23), the arrangement of said sections corresponding to the arrangement of the respective subsets of regions (31), whereby the user can select one of said subsets by selecting the respective one of said sections (page 3, lines 11-23). Therefore, the prior art of Smith teaches the limitations set forth in the instant application. Thus, the rejection is maintained.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SRILAKSHMI K. KUMAR whose telephone number is (571)272-7769. The examiner can normally be reached on 7:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sue Lefkowitz can be reached on 571 272 3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Srilakshmi K Kumar/
Primary Examiner
Art Unit 2629

SKK
June 10, 2008